

salesforce

# Generic Sidecar Injector

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**Hayk Baluyan, Senior MTS**

@baluyanhayk | hbaluyan@salesforce.com

**Mayank Kumar, Software Engineering Architect**

@krmayank | mayank.kumar@salesforce.com



# History



- Mutating admission controllers were released in Kubernetes 1.9
- Dynamic sidecar injection became a ubiquitous pattern
- Many internal teams quickly adopted the pattern
- Multiple teams started writing the same exact code and doing the same mistakes
- Inner source code into a single repo with generic configuration
- Generic Sidecar Injector was born



# What is it ?



- Open source framework for injecting sidecars to Kubernetes workloads.
- Supported sidecar types include containers, init containers and volumes.



# How to use it ?

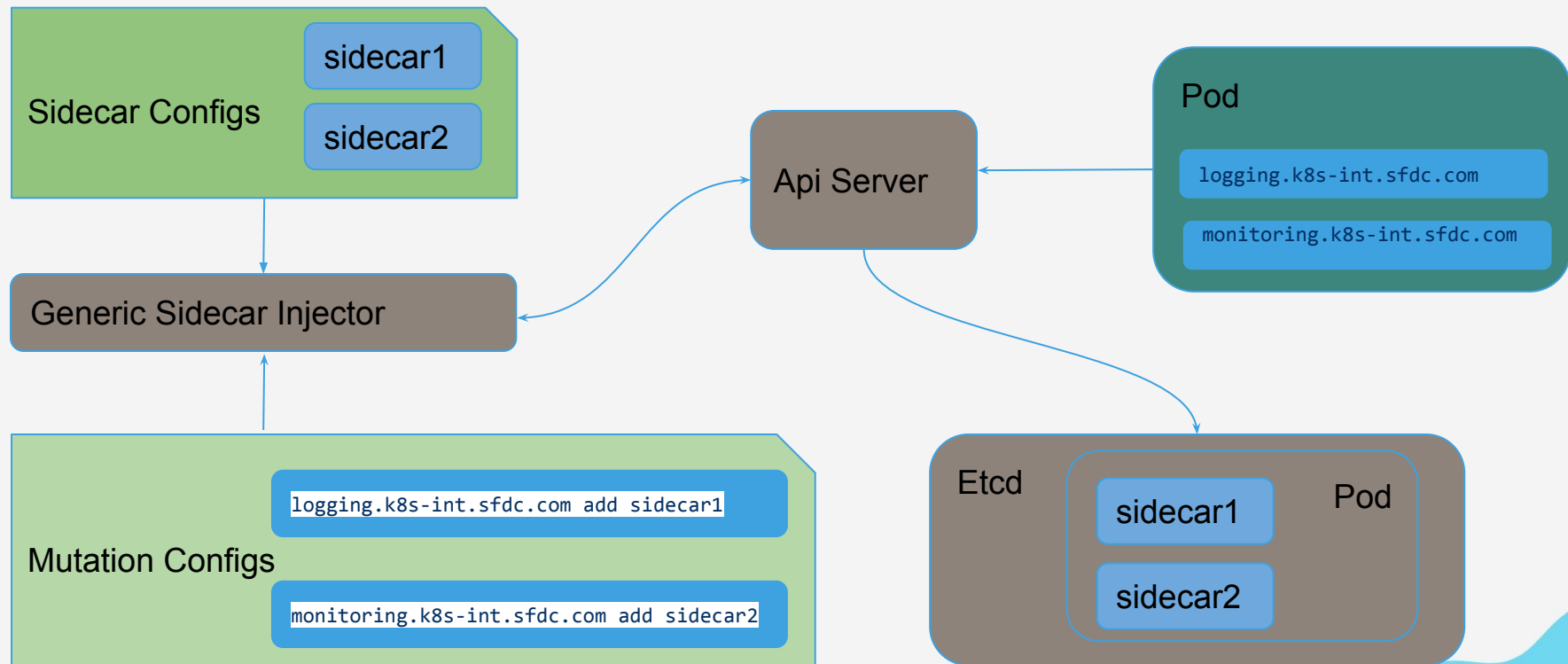


Divide the configuration of Mutating Admission controllers to two parts:

- What needs to be injected? (sidecar configuration)
- What triggers those injections? (mutation configuration)



# Architecture



# Features



- Supports injection of containers, init containers, and volumes
- Supports multiple mutation configs. This allows you to independently choose which mutations will trigger which injections from the sidecar config
- Support configuration of injected sidecar via annotations on the pod
  - sidecar config as Golang templates
  - native way using environment variables



# Advantages



- No need to write code for mutating admission controller
- 7 teams within Salesforce using the same code to solve multiple critical infrastructure sidecar needs (monitoring, logging, certificate rotation, image signing, etc)
- Inner sourcing avoids duplicate work, avoid reinventing the wheel, avoid repeating the same mistakes



# DEMO



# Summary



- Contribute [here](#)
- Read the blog [here](#)
- Try out an example [here](#)
- Come and say hi and/or ask questions at our booth.
  - TUES: 2:25 PM – 2:55 PM EST 2:40 PM – 3:10 PM EST





Thank  
you

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